

have a stretch of country which although as yet sparsely populated is filling up with a fair amount of rapidly, many thousands of new settlers coming in every year, some from Europe and some from the United States. Throughout this whole region there is a growing demand for fruit which will admit of a consumption far exceeding anything we have at present any idea of, provided we can get the surplus stock which can be easily produced in Ontario landed there so as to be sold at reasonable rates. Talking with a gentleman from Prince Albert some time ago on this subject of fruit, he said, "Why, we have been so accustomed to pay about fifteen cents a pound for fruit that now it has got down to eight and ten cents a pound it seems to be a comparatively cheap article of diet, and we are making use of it very freely."

FRUIT GROWING IN THE NORTH-WEST COUNTRY.—I shall next call your attention to another aspect of the subject, and consider what these people living in this district, extending for a thousand miles from east to west, and 350 from north to south, are able to do for themselves in the way of growing fruit. The cultivation of strawberries has been tried at a great many different points in this part of our country, and it has not been attended with much success. Strawberry vines are hardy, but in the autumn, about the time when the young runners begin to root, the ground in the North-West is usually so dry that for an inch or two the soil becomes almost like ashes, and the winds are so frequent that the vines are rarely still, and the runners are blown about from point to point and never stay long enough in one place to send out roots, and for that reason there is seldom much success in propagating the strawberry. Where irrigation can be practised that difficulty can be overcome. Under such circumstances plots of strawberries may be grown with a fair measure of success as far as multiplication of the plants are concerned. But there is another difficulty to contend with. In the springtime it often happens that heavy frosts occur in the morning and a hot sun shines during the day. This occurs usually in April and sometimes in the early part of May, after the strawberries are in flower, and you know the effect of severe frost on strawberry blossoms—it destroys them completely, and so lessens the crop that strawberry growing cannot be relied on anywhere as a profitable industry, and this fruit is chiefly grown by amateurs. Raspberries are cultivated more successfully, and some fairly good crops are grown in some parts of Southern Manitoba, and also in the neighborhood of Winnipeg, but there is not a sufficient supply to give the general public what they want in this line. Black cap raspberries are less hardy, and blackberries are usually too tender. Red and white currants can be grown very successfully all over Manitoba and the Territories, provided there are no severe spring frosts to injure the crop after the blossoms open; in that case they can be depended on as a fairly reliable crop. The same may be said of black currants, all the varieties of which are hardy and succeed well, and, barring the effect of frosts, where they get a favorable season the crops are usually good.

Among the large fruit no success in a general way has attended the efforts to grow apples, pears, such plums as we grow in the east, or grapes. At the Experimental Farm at Brandon—and similar experiments have been carried on 200 miles further west at the Experimental Farm at Indian Head—we have tested over 200 varieties of Russian apples of the hardiest sorts that can be found. We have also tested all the hardy varieties of pears, plums and cherries, and have also tried a large number of small fruits. None of the larger fruits have succeeded, although we have been working on this line at Brandon and Indian Head for more than ten years. We have sent thousands of apple trees to these farms but have never yet succeeded in producing an apple. Hence, as you see, we have not had much encouragement thus far. Near Morden in Manitoba, which is in the Red River Valley and south of Winnipeg, at an altitude very much the same as that of Winnipeg, that is about 700 feet, or nearly 500 feet lower than the experimental farm at Brandon, there is one farmer who has an exceptionally sheltered spot who has grown fair crops of crab apples on a few trees, and he has also produced a few larger apples of several Russian varieties. This is considered quite a feat in that country, and is chronicled in the newspapers, and specimens are photographed and made much of, showing that it is a feat not often or very easily accomplished. I visited this plantation several years ago. It is owned by Mr. Stevenson, who is an enthusiast in this work. There have also been a few crab apples produced in the neighborhood of Winni-

peg, and a few more in Southern Manitoba, and that is about the extent to which these fruits have been grown in that country thus far. I visited Edmonton, 200 miles north of Calgary, several years ago, and almost the first person I met when he knew who I was and where I came from said, "Oh, you must go and see Mrs. So-and-So's garden; she has got a Tetofsky apple on a tree, and you must see that before you go." So I went over to see this prodigy, and there happened to be an American friend travelling with me with a camera, so I asked him to come along and take a photograph of this wonderful fruit. When we got there we found that the apple was not a Tetofsky apple at all, but a Whitney Crab. (Laughter) As there was but one specimen on the lower part of the tree, and it was pretty well covered with foliage and the lady was much disappointed when it was pronounced to be a crab, we left the place without taking a photograph of this fruit. Altitude in the Northwest country often makes more difference and stands more in the way of success in the growing of trees and shrubs than latitude; hence in going west, as you rise higher and higher the difficulties increase. At Brandon, where the altitude is 450 feet greater than it is at Winnipeg, we have had no such success as that I referred to as having been had by Mr. Stevenson near Morden. The only variety of fruit that can be called an apple which we have yet produced at Brandon is the berried crab *Pyrus baccata*, a small crab which grows wild in the northern part of Siberia. This fruit, which is about as large as a cherry and with a stem almost as long would scarcely be recognized in this country as an apple—yet it is valuable for making jelly, for most of you no doubt know that jelly comes chiefly from the core, seeds and under the skin of the apple, and as these little apples are nearly all core seeds and skin they make more jelly per pound than the larger apples would, and it is just as good. We are, however, trying some experiments at Ottawa which I hope may result in increasing the size of this apple. The *Pyrus baccata* has been crossed with such apples as Tetofsky, Duches, Yellow Transparent, Fameuse and Ribston Pippin and quite a number of other varieties, including some of the hardier Russian forms, and we have now growing at Ottawa 750 of these young cross-bred trees, each one of which is a distinct variety, and we are hoping, by multiplying the chances in this way, to produce something good eventually, and trust that in a few years we shall be able to thus improve this small, wild Siberian crab and increase its size so as to make it a tolerably useful apple to the people in the Northwest country. We do not expect to produce such varieties as will be competitors to any extent with the fruit that Ontario could ship there, but if we could grow an apple equal to the Transcendent crab and produce it in abundance it would be worth hundreds of thousands of dollars to that country. In many districts remote from railways the people seldom taste fruit at all, and to be able to grow fruit as palatable as the Transcendent crab would be something to be proud of. Householders would rejoice in such a production to an extent which these of you who are privileged to be surrounded by beautiful fruits can scarcely understand. Besides, the growing of such apples in that country would not only add largely to the comforts of the householder, but would give the climate of the country an additional recommendation. As you go further westward the altitude increases, and by the time you reach Calgary you have attained an elevation of 3,388. If so little can be done at Brandon at a height of 1,150 feet, but little success can be expected in the higher altitudes. In Manitoba in the river valleys, in the lower altitudes, the wild plum is common and usually fruits well, but the quality of the fruit is very variable. A large proportion of the trees produce inferior fruit. Some of them, however, have fruit which is very acceptable to the people, and it varies in color as the wild plum does in the east, from yellow to red. The trees are generally hardy, and they will not only grow in the river valleys, but when transplanted to higher altitudes most of them will grow and bear well. The Sand Cherry, *Prunus pumila*, is also found throughout most of that section of the Dominion, growing in many localities as far north as Prince Albert, where the fruit is produced in considerable abundance. The fruit of this shrub varies also, like the wild plum, very much in its quality and character. Some bushes produce cherries that are quite a good size. I have seen them nearly as large as the English Morello; then again you find them but little more than a skin stretched over the stone, with no pulp at all worth speaking of, and not only astringent but bitter. By selecting the best of these varieties of Sand Cherry, as has been done at Brandon,

and growing seedlings from them and propagating these by layers and distributing them among the people, we are doing a work which is much appreciated. Should the experiments now being tried on the *Pyrus Baccata* prove successful, and the farther work of producing good varieties from the wild plum and the Sand Cherry by careful selection meet with good results, we have along these three lines of work some promise of useful fruits for this western country in the near future.

SOME NATIVE FRUITS.—In some districts wild strawberries are found, but not to any extent—the wild raspberry is much commoner. The fruit of the wild black currant is also common, and is used very generally, though it is rather strong in flavor. The Saskatoon berry is another favorite fruit in that country, and in plentiful years it is collected in large quantities and dried. The fruit is very much like what we know in the east as the Shad bush or June berry, and reminds one somewhat of the Blueberry in its flavor, and is a very good berry, especially if you are fruit hungry and cannot get anything else of that sort to eat. The Pin Cherry, *Prunus Pennsylvanica*, which grows in the east also has a very small fruit, yet it is regarded there with favor by many people, who gather it and make jams and jellies from the little pulp there is over the stone; and by gathering plenty of the fruit one can succeed in getting a reasonable amount of jelly. These smaller fruits, with the wild plum, the Sand Cherry, and further east down towards Rat Portage the Blueberry, make rather a meagre bill of fare. Hence there is a very large demand for good fruit, most of which Ontario and British Columbia could supply, but up to the present time about eighty per cent. of it has been supplied by the United States, some of it coming from California, some from Oregon and Washington, and some from the Western States of Illinois, Michigan and Minnesota. It seems scarcely creditable to the enterprise of our fruit growers that four-fifths of all the fruit that is at present used over this whole stretch of country, populated at present probably by nearly 250,000 people, is sent in from the United States. Here is a market that Ontario should do something to capture.

FRUIT GROWING IN BRITISH COLUMBIA—Let us see what British Columbia is doing, and what she can probably supply. Crossing the Rocky Mountains at a height about 5 000 or 6,000 feet you descend on the other side into what is known as the Columbia Valley, where the first crossing of the Columbia River occurs. In this valley, from Golden to Donald, which is at an altitude of about 2,530 feet, and much sheltered by high mountains, some experiments are being carried on in fruit growing, and although they have not been conducted long enough to demonstrate much, still there seems to be fair prospects of success with some of the hardier fruits in that valley. The Columbia River flows north at the first crossing, and makes a great bend above the base of the Selkirk range of mountains, and then flows south, so that after crossing the Selkirks, which form the second range of mountains at about the same altitude as that at which the Rockies are crossed, you descend into another valley where the Columbia is crossed the second time, and there the altitude is less. At that second crossing, at Revelstoke, it is only 1,475 feet—about 300 feet higher than we have at Brandon—and much more sheltered. There the climate is milder, and along that river valley from Revelstoke down to Rossland there have been within the last three or four years some very successful efforts made in the way of growing small fruits, and there are a few old-timers who have been there a number of years who have had apples and other trees which have been producing of late fairly good crops of fruit. Hence that may be taken as the beginning of the fruit growing district, or the eastern extremity of the fruit growing districts of British Columbia. After the third range of mountains known as the Gold range, is crossed, which is not nearly as high as either the Rockies or Selkirks, you strike another series of valleys at a point which you will find on the railway guide marked as Sycamous, a station which is 1,300 feet above the sea level, and stands at the head of what is called the Spulmacheen valley which extends south about 30 miles, and south of that lies the Okanagan valley, which most of you have heard of as a fruit growing district, where Lord Aberdeen has a large ranch, and has a 200 acre apple orchard which is coming into bearing very nicely. There is quite a large number of apples produced in that valley, but they get prices such as you would not dream of getting here. I travelled through that district in August last and visited Lord

reduced to five cents, and the year before last it came down to four cents; but as fruits began to be produced in considerable quantities and the surplus had to be shipped somewhere the growers could not afford to pay four cents per pound to send plums to Winnipeg—it made the price too high to permit of the consumption becoming very large—so they organized and formed an Association, and made arrangements with the railway for cheaper rates by freight, and sent a man through with each carload of fruit, who landed a certain number of boxes at Calgary, other lots at Regina and other points, taking the remainder of the car through to Winnipeg. They had the privilege of thus unloading as they went along, all at the same rate. This reduced the cost of transportation to something less than two cents, but it delayed the distribution of fruit very much, and by the time the car had reached Winnipeg with all the delays incident to the journey, the fruit which was left was usually in bad order. In the meantime the express company found they would have to do something in the way of reducing rates, if they were to secure any part of this business, so this year negotiations were opened between the Association of Fruit Growers of the Fraser Valley and the Dominion Express Company, and the Company very generously brought the rate down to \$2.25 from Vancouver or any point in British Columbia to Winnipeg or any point in the Northwest. This great reduction has given a wonderful impetus to fruit growing in that Province, and has given the growers courage, so that they are trying to make the best of their opportunities and are doing remarkably well. In connection with their shipping association they have meetings to discuss the best kinds of packages, and instead of shipping their fruit in clumsy rough boxes as they used to do two or three years ago, they are using the California packages now, those small light boxes with four baskets in a box, and all their plums are sent to market in that way. They are also paying more attention to the selection of their fruit, which is a matter of great moment if a profitable business is to be done. In that Association every grower must put his name on every box of fruit he ships, so that the careless packing is easily traced to its source, and the man gets such a rubbing down from the secretary who looks after the affairs of the Association that he is very apt to mend his ways in a short time; hence a much better condition now exists than formerly. Fruit reaches the consumer in about three days from the time of shipment by this arrangement with the express company and usually in good condition.

AN OPENING FOR ONTARIO FRUIT.—Ontario could secure a large part of this trade with Winnipeg and the west for apples and pears, also a considerable part of the trade in plums and cherries as far west as Regina, and as far as the grape trade is concerned, as I have already remarked, the whole of that is open to Ontario growers. Here is a market for our own fruits where the tastes of the people do not require to be educated to appreciate the flavor, for instance, of our grapes. Indeed, many of the people having been brought up in the east will prefer,—and I have been surprised at this—the Ontario grown grapes to the California grapes, which to my mind are very much better than those of Ontario; but having acquired a fondness for the musky flavor found in many of our grapes they will give the preference even at the same price to Ontario fruit. At present, Ontario fruit has not a very high reputation in Winnipeg, largely it is said, for the reason that in the past it has been very carelessly shipped. To put a lot of baskets of grapes in a freight car and have them bumped and thumped against other freight cars for four or five days on the way to Winnipeg, generally shakes the baskets of this fruit to such an extent that a large part of the grapes are reduced almost to a condition of pulp. When bruised in that way, they soon get mildewed, and in a closed car, unless the car is iced, the chances of getting fruit of that character to Winnipeg in good condition in such packages as you use to send them to Toronto is not very great. Indeed, there must be a very thorough reformation in that particular, and the interests at stake will warrant the taking of any reasonable pains to bring success, and I do not think that any form of package yet devised is better adapted for this purpose than that used by the British Columbia fruit growers, which is the California package. In this there are four baskets, each holding about 6 pounds, the whole package weighing about 25 pounds, a weight which is easily handled. I have no doubt that arrangements could be made by Ontario fruit growers with the express company whereby they would get at least as good rates as are given to

British Columbia people, and by this route fruit could be delivered in three days from time of shipping to any part of that country on the main line as far as Regina, and Ontario grapes if well put up and carefully handled should stand that length of time in transportation and reach their destination in perfect order. A word to the wise, it is said, is sufficient. I hope that some Ontario fruit growers, although they may have made unsuccessful attempts in the past, will use their best efforts towards capturing some fair share of this market. It will not do to run away with the idea that any sort of fruit will suit the Winnipeg people. In talking recently with the largest fruit merchant there, he said: "If you have at any time the opportunity of talking to the large fruit growers in Ontario, impress upon their minds the fact that nothing is too good for Winnipeg, and that it won't pay them to ship inferior fruit." He said "It is disagreeable for us to handle it, we have so many complaints, and it gives no profit whatever to the shipper, because so much of it has to be rejected." A demand for Ontario fruit once established in the Northwest country would be an ever-increasing one as the population multiplies, and would in a short time, I am sure, get to be a trade quite well worth looking after. Through the kindness of the manager of the Macpherson Fruit Company at Winnipeg I have been furnished with some particulars as to the quantity of fruit handled by that one firm during the past year, from that source. Mr. Scott tells me that they have handled of British Columbia plums this season about 10,000 cases of about 20 pounds each, besides small experimental shipments of 200 cases of strawberries and 25 cases of cherries. Many of the earlier shipments of plums he says, came in bad order, but the later shipments were all right. In regard to Ontario fruit, he said, "We have not had good results yet from plums or peaches, and we are inclined to think that it is a difficult matter to ship these two varieties of fruits to this point at a profit." He says it takes some time in a comparatively small market like that to dispose of a car load of fruit, and in the meantime the perishable varieties depreciate very rapidly. Grapes, however, he says, tomatoes and pears in baskets, or packed in boxes as the California pears are sent in, come in perfect condition, and if shipped in good refrigerator cars well iced, there would be no difficulty in carrying any quantity from Ontario to that market.

I might also speak of the demand further east, and nearer home, where there is another town of importance, Rat Portage, with 4,000 to 5,000 people, and some other smaller places between that and the fruit-growing districts of Ontario, which can scarcely be said to extend much further west than Pembroke. Beyond that you may say that fruit-growing is largely experimental, and the quantity of fruit produced is entirely insufficient for supplying the needs of the people. The residents in the west are hungry for fruit, and continually wondering why it is that with such vast quantities of fruit in Ontario, much of which is said to be sold at unremunerative prices, they should be debarred the privilege of disposing of large quantities of it at reasonable rates. I hope that some arrangement will be reached in the near future whereby the large surplus, which is an accumulating one in Ontario, will be made available to these fruit hungry people in the Northwest.